



OIPE

RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/09/915,789A

TIME: 16:40:35

Input Set : A:\07039-219001.txt

Output Set: N:\CRF3\06112002\I915789A.raw

ENTERED

4 <110> APPLICANT: Chen, Lieping
 6 <120> TITLE OF INVENTION: B7-H3 AND B7-H4, NOVEL IMMUNOREGULATORY
 7 MOLECULES
 9 <130> FILE REFERENCE: 07039-219001
 11 <140> CURRENT APPLICATION NUMBER: US 09/915,789A
 C--> 12 <141> CURRENT FILING DATE: 2002-06-04
 14 <150> PRIOR APPLICATION NUMBER: US 60/220,991
 15 <151> PRIOR FILING DATE: 2000-07-27
 17 <160> NUMBER OF SEQ ID NOS: 23
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 316
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Homo sapiens
 26 <400> SEQUENCE: 1
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 28 1 5 10 15
 29 Ala Leu Gly Ala Leu Trp Phe Cys Leu Thr Gly Ala Leu Glu Val Gln
 30 20 25 30
 31 Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu
 32 35 40 45
 33 Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn
 34 50 55 60
 35 Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala
 36 65 70 75 80
 37 Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe
 38 85 90 95
 39 Pro Asp Leu Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val
 40 100 105 110
 41 Arg Val Ala Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp
 42 115 120 125
 43 Phe Gly Ser Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys
 44 130 135 140
 45 Pro Ser Met Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr
 46 145 150 155 160
 47 Val Thr Ile Thr Cys Ser Ser Tyr Arg Gly Tyr Pro Glu Ala Glu Val
 48 165 170 175
 49 Phe Trp Gln Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr
 50 180 185 190
 51 Ser Gln Met Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Val Leu
 52 195 200 205
 53 Arg Val Val Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn
 54 210 215 220

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55 Pro Val Leu Gln Gln Asp Ala His Gly Ser Val Thr Ile Thr Gly Gln
56 225                230                235                240
57 Pro Met Thr Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser
58                245                250                255
59 Val Cys Leu Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg
60                260                265                270
61 Lys Ile Lys Gln Ser Cys Glu Glu Glu Asn Ala Gly Ala Glu Asp Gln
62                275                280                285
63 Asp Gly Glu Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His
64                290                295                300
65 Ser Asp Ser Lys Glu Asp Asp Gly Gln Glu Ile Ala
66 305                310                315
68 <210> SEQ ID NO: 2
69 <211> LENGTH: 951
70 <212> TYPE: DNA
71 <213> ORGANISM: Homo sapiens
73 <400> SEQUENCE: 2
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75 ctgtggttct gccacacagg agccctggag gtccagggtc ctgaagacc agtggtggca      120
76 ctggtgggca ccgatgccac cctgtgctgc tctttctccc ctgagcctgg cttcagcctg      180
77 gcacagctca acctcatctg gcagctgaca gataccaaac agctggtgca cagctttgct      240
78 gagggccagg accagggcag cgcctatgcc aaccgcacgg cctcttccc ggacctgctg      300
79 gcacagggca acgcatccct gaggtgacag cgcgtgctgt tggcggacga gggcagcttc      360
80 acctgcttcg tgagcatccg ggatttcggc agcgtgcccg tcagcctgca ggtggccgct      420
81 cctactcga agcccagcat gaccctggag cccaacaagg acctgcggcc aggggacacg      480
82 gtgaccatca cgtgctccag ctaccggggc taccctgagg ctgaggtgtt ctggcaggat      540
83 gggcagggtg tgcccctgac tggcaacgtg accacgtcgc agatggccaa cgagcagggc      600
84 ttgtttgatg tgcacagcgt cctgcgggtg gtgctgggtg cgaatggcac ctacagctgc      660
85 ctggtgcgca accccgtgct gcagcaggat gcgcacggct ctgtcaccat cacagggcag      720
86 cctatgacat tccccccaga ggccctgtgg gtgaccgtgg ggctgtctgt ctgtctcatt      780
87 gcaactgtgg tggccctggc ttctgtgtgc tggagaaaga tcaaacagag ctgtgaggag      840
88 gagaatgcag gagctgagga ccaggatggg gagggagaag gctccaagac agccctgcag      900
89 cctctgaaac actctgacag caaagaagat gatggacaag aaatagcctg a      951
91 <210> SEQ ID NO: 3
92 <211> LENGTH: 316
93 <212> TYPE: PRT
94 <213> ORGANISM: Homo sapiens
96 <400> SEQUENCE: 3
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98 1                5                10                15
99 Ala Leu Gly Ala Leu Trp Phe Cys Leu Thr Gly Ala Leu Glu Val Gln
100                20                25                30
101 Val Pro Glu Asp Pro Val Val Ala Leu Val Gly Thr Asp Ala Thr Leu
102                35                40                45
103 Cys Cys Ser Phe Ser Pro Glu Pro Gly Phe Ser Leu Ala Gln Leu Asn
104                50                55                60
105 Leu Ile Trp Gln Leu Thr Asp Thr Lys Gln Leu Val His Ser Phe Ala
106 65                70                75                80
107 Glu Gly Gln Asp Gln Gly Ser Ala Tyr Ala Asn Arg Thr Ala Leu Phe

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108		85		90		95
109	Pro Asp Leu	Leu Ala Gln Gly Asn Ala Ser Leu Arg Leu Gln Arg Val				
110		100		105		110
111	Arg Val Ala	Asp Glu Gly Ser Phe Thr Cys Phe Val Ser Ile Arg Asp				
112		115		120		125
113	Phe Gly Ser	Ala Ala Val Ser Leu Gln Val Ala Ala Pro Tyr Ser Lys				
114		130		135		140
115	Pro Ser Met	Thr Leu Glu Pro Asn Lys Asp Leu Arg Pro Gly Asp Thr				
116	145		150		155	160
117	Val Thr Ile	Thr Cys Pro Ser Tyr Arg Gly Tyr Pro Glu Ala Glu Val				
118		165		170		175
119	Phe Trp Gln	Asp Gly Gln Gly Val Pro Leu Thr Gly Asn Val Thr Thr				
120		180		185		190
121	Ser Gln Met	Ala Asn Glu Gln Gly Leu Phe Asp Val His Ser Val Leu				
122		195		200		205
123	Arg Val Val	Leu Gly Ala Asn Gly Thr Tyr Ser Cys Leu Val Arg Asn				
124		210		215		220
125	Pro Val Leu	Gln Gln Asp Ala His Gly Ser Val Thr Ile Thr Gly Gln				
126	225		230		235	240
127	Pro Met Thr	Phe Pro Pro Glu Ala Leu Trp Val Thr Val Gly Leu Ser				
128		245		250		255
129	Val Cys Leu	Ile Ala Leu Leu Val Ala Leu Ala Phe Val Cys Trp Arg				
130		260		265		270
131	Lys Ile Lys	Gln Ser Cys Glu Glu Asn Ala Gly Ala Glu Asp Gln				
132		275		280		285
133	Asp Gly Glu	Gly Glu Gly Ser Lys Thr Ala Leu Gln Pro Leu Lys His				
134		290		295		300
135	Ser Asp Ser	Lys Glu Asp Asp Gly Gln Glu Ile Ala				
136	305		310		315	
138	<210> SEQ ID NO: 4					
139	<211> LENGTH: 951					
140	<212> TYPE: DNA					
141	<213> ORGANISM: Homo sapiens					
143	<400> SEQUENCE: 4					
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145	ctgtggttct	gcctcacagg	agccctggag	gtccagggtc	ctgaagacc	agtgggtggca 120
146	ctggtgggca	ccgatgccac	cctgtgctgc	tccttctccc	ctgagcctgg	cttcagcctg 180
147	gcacagctca	acctcatctg	gcagctgaca	gataccaaac	agctggtgca	cagctttgct 240
148	gaggggccag	accagggcag	cgcctatgcc	aaccgcacgg	ccctcttccc	ggacctgctg 300
149	gcacagggca	acgcatccct	gaggctgcag	cgcgtgcgtg	tggcggacga	gggcagcttc 360
150	acctgcttcg	tgagcatccg	ggatttcggc	agcgtgcgcg	tcagcctgca	ggtggccgct 420
151	ccctactcga	agcccagcat	gaccctggag	cccaacaagg	acctgcggcc	aggggacacg 480
152	gtgaccatca	cgtgccccag	ctaccggggc	tacctgagg	ctgaggtgtt	ctggcaggat 540
153	gggcagggtg	tgccctgac	tggcaacgtg	accacgtcgc	agatggccaa	cgagcagggc 600
154	ttgtttgatg	tgacacagct	cctgcgggtg	gtgctgggtg	cgaatggcac	ctacagctgc 660
155	ctggtgcgca	acccctgct	gcagcaggat	gcgcacggct	ctgtcaccat	cacagggcag 720
156	cctatgacat	tccccccaga	ggccctgtgg	gtgaccgtgg	ggctgtctgt	ctgtctcatt 780
157	gcactgctgg	tggccctggc	tttcgtgtgc	tggagaaaga	tcaaacagag	ctgtgaggag 840
158	gagaatgcag	gagctgagga	ccaggatggg	gagggagaag	gctccaagac	agccctgcag 900

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159 cctctgaaac actctgacag caaagaagat gatggacaag aaatagcctg a          951
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162 <211> LENGTH: 282
163 <212> TYPE: PRT
164 <213> ORGANISM: Homo sapiens
166 <400> SEQUENCE: 5
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168 1 5 10 15
169 Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser
170 20 25 30
171 Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile
172 35 40 45
173 Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu
174 50 55 60
175 Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val
176 65 70 75 80
177 His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met
178 85 90 95
179 Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn
180 100 105 110
181 Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr
182 115 120 125
183 Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu
184 130 135 140
185 Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn
186 145 150 155 160
187 Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln
188 165 170 175
189 Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser
190 180 185 190
191 Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met
192 195 200 205
193 Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser
194 210 215 220
195 Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
196 225 230 235 240
197 Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn Ser
198 245 250 255
199 Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala Leu
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202 275 280
204 <210> SEQ ID NO: 6
205 <211> LENGTH: 849
206 <212> TYPE: DNA
207 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 6
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211 ggagcaattg cactcatcat tggctttggt atttcagga gacactccat cacagtcact 120

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212 actgtgcgct cagctgggaa cattggggag gatggaatcc tgagctgcac ttttgaacct 180
213 gacatcaaac tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 240
214 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatgtt cagaggccgg 300
215 acagcagtgt ttgctgatca agtgatagtt ggcaatgcct ctttgcggtt gaaaaacgtg 360
216 caactcacag atgctggcac ctacaaatgt tatatcatca cttctaaagg caaggggaat 420
217 gctaaccttg agtataaaac tggagccttc agcatgccgg aagtgaatgt ggactataat 480
218 gccagctcag agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtggtc 540
219 tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac cagctttgag 600
220 ctgaactctg agaatgtgac catgaagggt gtgtctgtgc tctacaatgt tacgatcaac 660
221 aacacatact cctgtatgat tgaaaatgac attgccaaag caacagggga tatcaaagt 720
222 acagaatcgg agatcaaaaag gcggagtcac ctacagctgc taaactcaaa ggcttctctg 780
223 tgtgtctctt ctttctttgc catcagctgg gcacttctgc ctctcagccc ttacctgatg 840
224 ctaaaataa 849
226 <210> SEQ ID NO: 7
227 <211> LENGTH: 25
228 <212> TYPE: PRT
229 <213> ORGANISM: Homo sapiens
231 <400> SEQUENCE: 7
232 Met Ala Ile Ser Gly Val Pro Val Leu Gly Phe Phe Ile Ile Ala Val
233 1 5 10 15
234 Leu Met Ser Ala Gln Glu Ser Trp Ala
235 20 25
237 <210> SEQ ID NO: 8
238 <211> LENGTH: 5
239 <212> TYPE: PRT
240 <213> ORGANISM: Bos taurus
242 <400> SEQUENCE: 8
243 Lys Phe Glu Arg Gln
244 1 5
246 <210> SEQ ID NO: 9
247 <211> LENGTH: 15
248 <212> TYPE: PRT
249 <213> ORGANISM: Homo sapiens
251 <400> SEQUENCE: 9
252 Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu Pro
253 1 5 10 15
255 <210> SEQ ID NO: 10
256 <211> LENGTH: 4
257 <212> TYPE: PRT
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262 1
264 <210> SEQ ID NO: 11
265 <211> LENGTH: 241
266 <212> TYPE: PRT
267 <213> ORGANISM: Homo sapiens
269 <400> SEQUENCE: 11
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VERIFICATION SUMMARY

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date